

**Responses to Comments on the Staff Analysis and Request for Direction on Long-Term Postclosure
Maintenance and Corrective Action Financial Assurances for Landfills**
California Integrated Waste Management Board
March 2008

Following are the generalized comments and responses to comments received from the AB 2296 Consulting Group regarding the: *Staff Analysis and Request for Direction on Long-Term Postclosure Maintenance and Corrective Action Financial Assurances for Landfills*

Staff Report Comments:

Comment:

Corrective Action costs identified in the report should identify whether the costs shown are for only those costs relating to the water quality corrective actions and not non-water quality issues.

Response:

The corrective action costs identified in the report are identified as the costs developed by the individual landfill operators and submitted to and approved by the various Regional Water Quality Control Boards in conformance with the current requirements of Title 27 of the California Code of Regulations for reasonably foreseeable corrective action cost estimates.

Comment:

Show factors for publicly owned/operated landfills vs. those by private sectors.

Response:

Staff consistently proceeded with the review and analysis of the ongoing maintenance of closed landfills in a deliberate process to not draw attention to potential differences in public and private operations of landfills. However, in the upcoming use of the funding model, many alternative “funds” will be modeled, including scenarios with limited participation by various sectors of the industry. The modeling scenarios will be the topic of a workshop to be held in February 2008.

Comment:

Privately owned landfill operators should be required to match the liability exposure assurance to the facility’s Solid Waste Facility Permit (SWFP) entitlement.

Response:

Conformance with both California law and federal requirements will be maintained for all operators in regards to all aspects of planning, permitting and providing of financial assurance demonstrations for the facility during consideration of any alternative permitting and plan approval process considered by the Board.

Comment:

The Staff Report should be expanded to provide a comparison of the existing method for determining Financial Assurance Estimates vs. the proposed “Fund as You Build Option” to ensure compliance with AB 2296 requirements and intent.

Response:

The Staff Report was not intended to provide the answers to all the potential scenarios to be examined by the Board regarding the long-term issues of closed landfills. In contrast, the Staff Report laid out a number of possible solutions and a time-line and process by which these potential solutions can be examined. During the upcoming months, all the proposed scenarios will be further examined and solutions meeting all statutory requirements, including provisions enacted by AB 2296, will be considered.

Comment:

The analysis and regulations should provide the operator with the option to choose whether to permit and develop the site in phases or to seek a permit for the total capacity of the site.

Response:

Under the current regulatory structure, the operator does have the option to permit only a portion of the ultimate projected landfill. However, all proposed scenarios will be further examined and solutions meeting all statutory requirements, including provisions enacted by AB 2296, will be considered during the rulemaking. A draft rulemaking workshop for Phase II proposed amendments is scheduled for May 2008 to discuss the proposed amendments.

Comment:

Closure cost estimates and financial assurances should be based on the maximum exposure of the liability and should match the permit entitlements.

Response:

Conformance with both California law and federal requirements will be maintained for all operators in regards to all aspects of planning, permitting and providing of financial assurance demonstrations for the facility during consideration of any alternative permitting and plan approval process considered by the Board.

Comment:

The operator should be allowed to gradually fund the estimated closure cost, provided the amount is sufficient to close the site at any point in time, should the owner/operator default on its obligations or be in bankruptcy.

Response:

Conformance with both California law and federal requirements will be maintained for all operators in regards to all aspects of planning, permitting and providing of financial assurance demonstrations for the facility during consideration of any alternative permitting and plan approval process considered by the Board.

Comment:

The analysis should clarify whether identifying the phased increased exposure of the facility is cumulative and includes the liability cost of closed areas or completed phases (un-closed) of development plus cost of proposed phases within the 5-year permit period.

Response:

The Staff Report identified direction to consider regarding the phased pay-in periods that identified costs which were cumulative in nature to fully close the site. The postclosure maintenance of the site is currently calculated on the total permitted site which represents the greatest extent of the costs of postclosure maintenance as required under existing regulations. Consideration in upcoming workshops during March and May 2008 will focus on the postclosure maintenance aspects and the proposal of rulemaking language, respectively. Conformance with both California law and federal requirements will be maintained for all operators in regards to all aspects of planning, permitting and providing of financial assurance demonstrations for the facility during consideration of any alternative permitting and plan approval process considered by the Board.

Comment:

The staff report analysis should include a discussion, including a demonstration, of how the proposed "fund as you build option" compares with the existing method for determining closure cost estimates and financial assurances under current regulations.

Response:

The Staff Report was not intended to provide the answers to all the potential scenarios to be examined by the Board regarding the long-term issues of closed landfills. In contrast, the Staff Report laid out a number

of possible solutions and a time-line and process by which these potential solutions can be examined. During the upcoming months, all the proposed scenarios will be further examined and solutions meeting all statutory requirements, including provisions enacted by AB 2296, will be considered. Specifically, in March 2008 the postclosure maintenance costs will be examined and in May 2008 the proposed rulemaking will be discussed.

Comment:

The staff report should be revised to include a section discussing both the solid waste industry and the local government perspectives on the closure cost estimates and financial assurances as currently proposed.

Response:

The Staff Report was not intended to provide the answers to all the potential scenarios to be examined by the Board regarding the long-term issues of closed landfills. In contrast, the Staff Report laid out a number of possible solutions and a time-line and process by which these potential solutions can be examined. During the upcoming months, all the proposed scenarios will be further examined and solutions meeting all statutory requirements, including provisions enacted by AB 2296, will be considered.

Comment:

The staff report is a reasonable and fair summary of the problem and an appropriate action plan to accomplish the tasks assigned in AB 2296.

Response:

The Staff Report was not intended to provide the answers to all the potential scenarios to be examined by the Board regarding the long-term issues of closed landfills. As commented, the Staff Report laid out a number of possible solutions and a time-line and process by which these potential solutions can be examined. During the upcoming months, all the proposed scenarios will be further examined and solutions meeting all statutory requirements, including provisions enacted by AB 2296, will be considered.

Comment:

Where are the landfills that will be closed by 2009 which are identified in the staff report?

Response:

The specific landfills which have closed and the proposed closure dates are all available within the Board's Solid Waste Information System (SWIS). The identification of the landfills in this response document is not productive to the understanding of the situation under consideration. All aspects of the postclosure maintenance of the closed landfills will next be discussed during a scheduled workshop in March 2008.

Comment:

What threats do the closed landfills pose?

Response:

The threats of all closed landfills are site specific elements, including but not limited to the types of waste disposed, the location of the facility, the manner of disposal, the containment design and construction, etc. The Staff Report made recommendations to proceed in an orderly fashion in the further discussion of identification and weighting of potential threats and possibilities for providing assurances to the State of the operator's ability to respond to these threats.

Comment:

Are the closed landfills public, private, covered by corrective action financial assurance demonstrations, and are they rural small sites or large urban sites?

Response:

The currently closed landfills fall within each of the categories described in the comment. The Board is committed to an ongoing process to evaluate the many alternatives available to pursue additional assurance that all closed facilities will be maintained in a manner that will not impact human health and safety and the

environment. All aspects of postclosure maintenance and reasonably foreseeable corrective action will be the topics of workshops during February through May 2008.

Comment:

The problem statement makes statements that need further description of the facilities being identified.

Response:

The problem statement in the Staff Report is a brief summary of the problem identified by Board direction to staff in 2006, after more than two years previous discussions, workshops and working group sessions with all stakeholders interested in the topics. Specific to the facilities identified – the facilities considered throughout the study include all the facilities subject to the Board’s financial assurances rules. These facilities are all landfills that were operated on or after January 1, 1988.

Comment:

How are the “more than \$600 million in unassured costs by the end of the century” characterized?

Response:

The details of the unassured costs and how they were derived are available in the background papers and discussions as presented to the Board and at the working group sessions and workshops since 2003. In brief, the total cost, is that cost as currently estimated, which is needed to maintain the closed facilities and the currently operating facilities scheduled to close during this century which is beyond the financial assurance demonstrations currently provided for the 282 landfills currently subject to the Board’s financial assurance rules. To clarify the statement within the Staff Report, the actual statement is “By the middle of this century the net present value of unassured PCM costs for all sites in PCM as currently estimated could be more than \$600 million, growing to an accumulated unassured value of \$3.2 billion by the end of this century.”

Comment:

Are these unassured costs the result of bad estimates, RWQCB failure to apply current law, 30-year demonstrations, etc.?

Response:

As identified above, these costs are the result of current postclosure maintenance estimates and the current financial assurance demonstrations for these estimates.

Comment:

Do figures 1, 2, & 3 include updates for inflation? This should be explained in the text.

Response:

Figure 1 is simply a count of facilities which have closed and entered the postclosure maintenance phase.

Figure 2, as stated in the Staff Report, is “...the net present value of unassured PCM costs for all sites in PCM as currently estimated.” Also, as identified in the Staff Report, “These values are derived from the PCM cost estimates as they are currently represented by the owners/operators today. The estimates neither identify any decreases in ongoing PCM expenses over time or any increases in the same expenses. There is currently no methodology to predict when or to what degree sustained reductions in the estimated PCM expenses at closed landfills will occur.”

Figure 3 is a current listing of the types of financial mechanisms provided, the count of each utilized, and the total value. As described in the Staff Report, “the Board currently identifies and allows twelve distinct FA mechanisms for owners/operators to provide assurances to the State of their ability to maintain and care for their facilities.”

Comment:

The staff report should more specifically identify water quality related corrective action references and non-water quality related corrective action references.

Response:

The corrective action costs identified in the report are identified as the costs developed by the individual landfill operators and submitted to and approved by the various Regional Water Quality Control Boards in conformance with the current requirements of Title 27 of the California Code of Regulations for reasonably foreseeable corrective action cost estimates. There are no current requirements to develop and submit non-water quality related corrective action cost estimates. All discussions of future consideration of reasonably foreseeable corrective action estimates are identified as non-water quality related if they are not water quality related. Otherwise, reference to "corrective action" relating to either both water and non-water quality related or only water quality related is determined by the usage in the specific instances. The Board will be holding a number of workshops during February through May 2008 to further discuss the various issues raised in the Staff Report. Every effort will be taken to ensure clarity of thought throughout these discussions.

Comment:

Figure 3 seems to assume that postclosure maintenance estimates do not include non-water related corrective actions. The report should note that some of these costs are included and distinguish these costs and quantify these costs.

Response:

Figure 3 reports financial assurance demonstrations by the type of financial mechanism provided and the coverage identified by the mechanism description. The discussions throughout the study process identified that some postclosure maintenance cost estimates include some aspects of corrective action activities, whether water quality related or non-water quality related, for some facilities. However, as these costs are included within the developed postclosure maintenance estimates and not identified as corrective action activities, without a thorough re-submittal of the postclosure maintenance plans and re-review and subsequent approval, these costs are not readily identifiable. One proposed result of the contractor study is the re-evaluation of each postclosure maintenance plan and estimate as the regulatory cycle of updates to plans progresses over the coming years. These re-submittals and evaluations should clarify costs associated with maintenance of closed facilities and costs related to corrective action activities, whether water quality related or non-water quality related.

Comment:

General concerns with the concept of extending the 30-year requirement for postclosure maintenance insurance indefinitely as insurers will not provide affordable instruments unless there is a defined period of coverage.

Response:

The Staff Report acknowledges this limitation with the insurance demonstration and recommends that the Board not pursue the use of insurance for ongoing postclosure maintenance financial assurance demonstrations.